

OCC Report to Congress on Year 2000 Activities Fourth Quarter 1998

EXECUTIVE SUMMARY

Based on the results of the OCC's Year 2000 supervisory activities to date, the vast majority of national banks remain on schedule to meet the June 30, 1999 Federal Financial Institutions Examination Council deadline to complete Year 2000 remediation efforts. Highlights of the progress made by national banks and the OCC to date include:

- Most banks are well into their validation (testing) phase. OCC examinations reveal that most testing plans are satisfactory.
- The OCC is using a variety of enforcement tools to effect prompt remedial action by financial institutions that are rated less than satisfactory.
- The FFIEC issued additional guidance in the form of Questions and Answers on Year 2000 Contingency Planning, Customer Communications Outline, and Year 2000 Safety and Soundness Standards.
- The OCC is actively involved with the other FFIEC agencies in contingency planning for the Year 2000.
- Public confidence concerns, international Year 2000 efforts, and infrastructure issues continue to be major risk factors facing banks and banking regulators in addressing Year 2000 problems.
- The OCC completed Year 2000 renovations and validation of all its internal mission-critical systems on November 30, 1998.

The OCC's comprehensive Year 2000 supervision program, which includes on-site and off-site examinations, examiner training, quality assurance mechanisms, and outreach programs, ensures that national banks address Year 2000 concerns and take appropriate corrective actions in advance of the century date change.

EXAMINATIONS OF FINANCIAL INSTITUTIONS

The Phase II Workprogram -- Examination Results

The FFIEC adopted the Phase II Workprogram in June 1998. The workprogram is designed to be used through the second quarter of 2000. The Phase II examination procedures focus primarily on the validation (testing) and implementation phases of the Year 2000 project plans and contingency plans. The OCC will complete two onsite examinations of all national banks and federal branches and agencies by July 1999. The first examination, which was completed by January 1999, focused primarily on evaluating test plans to determine if each institution had an adequate test plan in place prior to commencing its testing program. The second round, now underway, concentrates on evaluating testing results, business resumption contingency plans, and customer risk assessments and awareness programs.¹ The OCC will conduct additional Year 2000 on-site examinations, as appropriate, in those banks that have inadequate Year 2000 project programs, and will continue to conduct quarterly reviews at each national bank to monitor national bank preparations and follow-up on any outstanding supervisory issues.

The results of our examinations through December 31, 1998 showed 97 percent of the approximately 2,700 institutions supervised by the OCC (national banks, service providers, software vendors, Federal branches, and credit card banks) were rated "satisfactory." Three percent were rated "needs improvement" and nine institutions were rated "unsatisfactory." These fourth quarter ratings are similar to the third quarter ratings, in which 96 percent of institutions were rated "satisfactory," four percent were rated "needs improvement," and eight institutions were rated "unsatisfactory."

Table 1
Year 2000 Summary Evaluations
By Asset Size
December 31, 1998

<i>Evaluation</i>	<i><\$100MM</i>	<i>\$100MM to \$500MM</i>	<i>\$500MM to \$1B</i>	<i>Over \$1B</i>	<i>Overall Percent (# Institutions)</i>
<i>Satisfactory</i>	98%	98%	98%	92%	97%
<i>Needs Improvement</i>	2%	2%	1%	8%	3%
<i>Unsatisfactory</i>	< 1%	< 1%	1%	0%	<1%

Source: OCC Year 2000 Database

¹The OCC's second round of Phase II examinations and ongoing quarterly reviews are similar in scope to examinations being conducted by other federal banking agencies and referred to by those agencies as "Phase III" examinations.

The OCC found that institutions that were rated less than satisfactory during the fourth quarter demonstrated several common problems and deficiencies, including:

- Inadequate testing programs,
- Inadequate vendor management,
- Incomplete remediation contingency plans,
- Failure to meet FFIEC timeframes, and
- Incomplete assessments of customer Year 2000 risk.

While national banks' overall progress to date is encouraging, it is important to note that the OCC's Year 2000 ratings are no more than a point-in-time snapshot of the industry's progress and cannot necessarily predict the ultimate success of the industry's Year 2000 remediation efforts. In some respects, the overall improvement in ratings throughout 1998 was the result of relatively straightforward corrections of process deficiencies. The OCC anticipates that ratings of some institutions may fluctuate, particularly if institutions encounter problems during the testing phase.

Testing Efforts

Testing is the most critical step in ensuring that Year 2000 remediation efforts were effective. To better monitor bank efforts and enhance our ability to identify banks with significant deficiencies, the OCC is collecting data on each national bank's testing program. As of December 31, 1998, about 83 percent of financial institutions examined by the OCC had begun the validation phase for mission-critical systems and 9 percent were in the implementation phase, an increase from 60 percent of institutions which had begun the validation phase and 3 percent which were in the implementation phase by September 30, 1998.

The vast majority of national banks expect to meet the FFIEC's June 30, 1999 completion date for testing and implementation of Year 2000 ready systems. Banks report that testing efforts are taking longer and are costing more than anticipated to complete. The OCC has found few substantive issues associated with testing. However, the OCC is seeing some slippage for a small percentage of institutions, as target dates for completion of testing and implementation move from the first quarter to the second quarter of 1999. Among the issues that banks have discovered include problems associated with leap year day -- February 29, 2000. Testing efforts reveal that leap year day continues to generate errors in computer programs.

While the OCC's examination results reveal that most banks' test plans are adequate, some bank plans have not been sufficiently comprehensive. By conducting a first round of Phase II examinations early on, the OCC's supervisory schedule has allowed banks time to expand or correct their programs and to develop more comprehensive plans. By year-end 1998, only a few

test plan deficiencies were still outstanding.

The OCC has developed a program to centrally review proxy test results and disseminate the findings to all examiners through our internal Year 2000 website.² The proxy test reviews are being conducted by contracted experts with oversight and input from examiners that supervise the respective institutions. The program will help us draw consistent conclusions, communicate key concerns, and identify needed follow-up. The centralized review of proxy tests began late in the fourth quarter 1998 and will continue throughout the remainder of the OCC's review of test results.

The OCC and the other FFIEC agencies continue to participate in industry-sponsored conferences and seminars to emphasize the importance of testing and to answer questions regarding FFIEC expectations. We are working closely with the Bank Administration Institute in its efforts to coordinate Year 2000 testing among participating banks, and we continue to monitor the efforts of the Mortgage Bankers Association in its efforts to coordinate testing of mortgage banks and mortgage-related Government Sponsored Enterprises.

Service Providers and Software Vendors

In recognition of the important role that third-party service providers and software vendors play in processing data and developing software, the OCC and the other FFIEC agencies are examining hundreds of service providers and software vendors. The OCC is the lead agency in examining five service providers under the Multi-Regional Data Processing Servicers (MDPS) program and four software vendors under the Shared Application Software Review (SASR) program. In addition, the OCC supervises and examines 34 independent data centers (IDCs) used by national banks, and 76 banks and affiliated servicers that provide data processing services to non-affiliated financial institutions. The ratings for service providers and software vendors have not changed significantly since the third quarter. Table 2 provides a summary of fourth quarter Year 2000 evaluations of OCC-supervised service providers and software companies.

² In proxy testing, the service providers or software vendors test with a representative sample of financial institutions that use a particular service or software program. Test results then are shared with similarly situated clients of the service provider or users of the software package.

Table 2
Year 2000 Summary Evaluations
Service Providers and Software Vendors
December 31, 1998

<i>Summary Evaluation</i>	<i>OCC Supervised MDPS</i>	<i>OCC Supervised SASRs</i>	<i>OCC Supervised IDCs</i>	<i>OCC Supervised Institutions serving Non-Affiliated Institutions</i>	<i>Total</i>
<i>Satisfactory</i>	5	4	33	75	117
<i>Needs Improvement</i>	0	0	1	1	2
<i>Unsatisfactory</i>	0	0	0	0	0
<i>Total</i>	5	4	34	76	119

Source: OCC Year 2000 Database

During the third and fourth quarters, a team comprised of examiners from the OCC's Bank Information System (BIS) cadre and Year 2000 consultants reviewed the testing plans of large service providers and software vendors supervised by the OCC. This centralized review was designed to provide consistent and in-depth reviews of testing plans. It has helped the OCC to identify key issues to consider when assessing testing plans of service providers, software vendors, and their client banks. The OCC shared the results of these reviews with the other FFIEC member agencies. The OCC's external consultants assist the OCC in reviewing selected proxy test results.

The OCC expects the vast majority of national banks that rely on service providers and software vendors will be ready for the century date change. However, we continue to gather information during examinations to assess the exposure of banks to service providers and software vendors with less than satisfactory ratings. We also are assessing the capacity of "satisfactory" rated service providers and software vendors to absorb institutions serviced by non-compliant servicers.

Quality Assurance of Year 2000 Ratings

Clarification of Ratings At the conclusion of each Year 2000 examination, the OCC assigns a "satisfactory," "needs improvement," or "unsatisfactory" rating. The Year 2000 summary rating criteria were clarified in a memorandum issued to all OCC examiners in November 1998 and in a February 17, 1999 letter from Comptroller Hawke to all national bank CEOs. The ratings are based on the following criteria:

Satisfactory - A bank should be rated "satisfactory" if it: is expected to meet all FFIEC testing time frames on or shortly after the prescribed target dates; has a written testing program that

adequately addresses all testing issues; has completed assessing material customers' Year 2000 preparedness; has developed an adequate customer awareness strategy; and has adequate remediation contingency plans for mission-critical systems and has begun development of Year 2000 business resumption contingency plans.

Needs Improvement - A bank should be rated "needs improvement" if it: is not expected to meet all FFIEC testing time frames on or shortly after the target dates; its written testing program does not adequately address all testing issues; its assessment of material customers' Year 2000 preparedness is incomplete; its customer awareness strategy is incomplete or is not responsive to customer concerns; or its remediation contingency plans are inadequate and it has not begun development of Year 2000 business resumption contingency plans.

Unsatisfactory - A bank should be rated "unsatisfactory" if it: is seriously behind its testing schedule and is not expected to meet the June 30, 1999 FFIEC deadline; does not have a written testing program; has not completed an assessment of its material customers' Year 2000 preparedness; has not developed an adequate customer awareness strategy; does not have remediation contingency plans in place; or has not begun development of Year 2000 business resumption contingency plans.

Review of Examinations and Reporting In addition to clarifying ratings, the OCC has implemented two other quality assurance mechanisms to ensure that our Year 2000 summary ratings are accurate. First, the OCC developed a Year 2000 database that requires examiners to answer specific questions on each national bank's Year 2000 project plan and compliance with FFIEC guidance. It allows the OCC to monitor the national banking system's progress in addressing Year 2000 problems, identify systemic issues, and assist in meeting the information needs of senior management and outside sources. A number of the key questions are analyzed to determine if any apparent inconsistencies exist between the database responses and the institution's Year 2000 rating. Exceptions prompt examiners and senior supervisory staff to review documentation to ensure that Year 2000 ratings are fully supported.

The second mechanism is a more in-depth review of Year 2000 examinations to assess the quality and consistency of supervision among national banks and service providers. A team of experienced examiners are assessing examination results of a sample of independent data centers and large, mid-sized, and community banks with less than satisfactory ratings. The objective of the reviews is to assess whether defined examination objectives of the Phase II Workprogram were met. These reviews of Year 2000 examinations began in August 1998 and will continue through June 1999.

These quality assurance processes improve the accuracy of our Year 2000 ratings and the integrity of our Year 2000 database.

Enforcement

The OCC is using a variety of enforcement tools to effect prompt remedial action by financial institutions which are rated less than satisfactory. The OCC's enforcement policy is determined largely by: (1) an institution's Year 2000 rating; (2) an institution's progress in complying with any previously issued supervisory directive or other informal or formal enforcement action³; (3) the cooperation, responsiveness, and capability of the institution's management and board of directors; and (4) the time remaining prior to the Year 2000.

As of February 16, 1999, the OCC has issued 339 Supervisory Directives and one Safety & Soundness Order; entered into seven Memoranda of Understanding and eight Formal Agreements; obtained seven Commitment Letters; and initiated the Safety & Soundness Order process against eight banks, all of which have submitted acceptable Safety & Soundness Plans. In addition, the OCC has issued a Consent Order to an independent service provider that has servicing contracts with three national banks and that received an "unsatisfactory" Year 2000 summary evaluation.

The OCC's Year 2000 enforcement policy centralizes decision making in Washington, D.C. in order to ensure uniform responses. All recommendations for formal and informal enforcement actions, other than Supervisory Directives, are considered by the Washington Supervision Review Committee, which advises the Senior Deputy Comptroller for Bank Supervision Operations, Leann G. Britton. Ms. Britton authorizes formal and informal enforcement actions, including the initiation of the Safety & Soundness Order process against banks.

The OCC's Year 2000 enforcement policy requires the agency to take progressively more severe actions against banks that are lagging in their Year 2000 readiness preparations as time progresses toward the century date change. Consequently, for banks that receive "needs improvement" and "unsatisfactory" ratings, we now are relying more heavily on the Safety & Soundness Order process, and less on Supervisory Directives and other informal enforcement tools. Overall, we

³ A Supervisory Directive is a written instruction from the OCC to bank management ordering the bank to take specific corrective actions necessary to remediate a noted Year 2000 deficiency. It is considered an informal enforcement action. A Memorandum of Understanding is a two-party agreement between the OCC and the bank that is used to reflect the bank's commitment to correct its problems. A Commitment Letter is a unilateral document that the bank sends to the OCC. Both are considered informal enforcement actions. A Formal Agreement is an agreement between the OCC and the bank that the OCC uses to require the bank's commitment to correct deficiencies. Violation of a Formal Agreement can be used as the basis for a cease and desist order and result in the imposition of a civil money penalty (CMP). A Consent Order is a Cease and Desist Order issued with the consent of the institution. It is similar in content to a Formal Agreement but, in addition to the assessment of CMPs for violations, the order can be enforced through an action for injunctive relief in federal district court. A Safety and Soundness Order is similar to a Consent Order, but it is imposed unilaterally by the agency following notice of failure to adhere to safety and soundness guidelines. Pursuant to 12 U.S.C. § 1831p-1, the Federal banking agencies may require a bank that violates safety and soundness guidelines or regulations to file an acceptable corrective plan. Further, if the bank fails to submit or implement a plan, the agency may issue a "Safety and Soundness Order." The agencies issued on October 15, 1998 interim "Interagency Guidelines Establishing Standards for Safety and Soundness." See 12 C.F.R. Part 30, Appendix A. Formal Agreements, Consent Orders, and Safety and Soundness Orders are public documents; Supervisory Directives, Commitment Letters, and Memoranda of Understanding are not.

believe that the enforcement actions we have taken to date have been successful in prompting banks to comply with FFIEC and OCC Year 2000 policy.

Examination Support

Expertise The OCC's Year 2000 supervision strategy includes a program to help examiners address problems they encounter by providing them with support from technical experts, including OCC information technology staff and outside consultants. The program includes the following elements:

- Rapid Response Team -- The OCC has formed a rapid response team of information technology (IT) and contracted experts to help examiners who request assistance on a particular Year 2000 examination. The team assists examiners in assessing testing processes in banks with complex operations.
- Year 2000 Help Desk -- The OCC continues to support examiners through its Year 2000 "help desk." Policy and operations staff, assisted by expert staff from the Information Technology Services unit, answer questions and assist examiners. OCC examiners ask questions by sending e-mails and faxes to our Year 2000 Supervision Policy and BIS examination support units. Answers to questions are posted on the OCC's internal Year 2000 webpage.

Environmental Systems In an effort to assess progress in remediating environmental systems (elevators, HVAC, security, etc.), a team of OCC examiners developed environmental systems examinations procedures and then used these procedures to review the environmental systems of 30 national banks where OCC examiners are stationed. The examination procedures revealed several common concerns, including: missing project plan milestones, inconsistent designation of environmental systems as mission-critical, and inadequate reporting to senior management. We found that many banks were concentrating on remediation of their information technology systems and paying insufficient attention to environmental systems. The findings from the reviews are factored into the overall Year 2000 assessment of each of these banks. The environmental systems reviews began in September 1998 and are scheduled for completion during the first quarter of 1999. Deficiencies identified during the environmental systems reviews generally have been addressed by the relevant banks. The OCC recently sent out the procedures to all national banks for use as a resource tool.

Training The OCC has an extensive and ongoing training program. Initiatives completed or underway since the last report include:

- Additional formal training to approximately 600 examiners in January 1999 on how to assess testing results and business resumption contingency planning.
- Updates to a CD-ROM-based training tool. The CD has general information on the Year 2000 problem, FFIEC guidance, and the OCC's supervisory activities. The Year 2000 CD-ROM was

sent in December 1998 to all national banks, OCC examiners, other FFIEC agencies, and a number of international regulators of financial institutions.

- Periodic conference calls to keep examiners apprised of the latest Year 2000 developments, answer questions, and address Year 2000 examination issues. The conference calls, which began in early September 1998, will be held periodically for as long as they are necessary. Field examiners, headquarters staff, and consultants participate in the calls.
- Staff conference training on Year 2000 hot topics during February, March, and April 1999. In addition to an overview of the status of national banks' Year 2000 readiness, the presentations will address customer awareness and enforcement tools. All field examiners are required to attend these presentations.

RECENT FFIEC GUIDANCE

Q&A on Year 2000 Contingency Planning

On December 11, 1998, the FFIEC released "Questions and Answers Concerning Year 2000 Contingency Planning." This guidance answers frequently asked questions of financial institutions. It describes a number of important issues related to effective contingency planning, including the factors that financial institutions should consider in developing business resumption contingency plans. In developing Year 2000 business resumption contingency plans, the FFIEC Q&A document states that financial institutions should consider:

- Educating customers about the Year 2000 problem in order to minimize unwarranted public alarm that could cause serious problems for financial institutions and their customers;
- Evaluating the cash demands of a financial institution's customers to determine whether it needs to arrange for additional cash reserves;
- Anticipating unusual funding needs in late 1999 and early 2000 arising, for example, from a surge in deposit outflows or loan demand;
- Ensuring that financial institution employees are trained to implement Year 2000 business resumption contingency plans; and
- Validating the Year 2000 business resumption contingency plan using an independent and qualified source.

The FFIEC expects financial institutions to substantially complete the four phases of the business resumption contingency planning process by June 30, 1999.

Customer Communication Outline

On February 17, 1999, the OCC released Advisory Letter 99-02, FFIEC Customer Communication Outline. This guidance supplements previous FFIEC guidance on Year 2000 customer awareness programs and encourages national banks to consider doing the following in future customer communications:

- Address customer concerns and expectations directly by underscoring that maintaining confidence in banking with the financial institution -- now and after the Year 2000 -- is a top priority;
- Explain that the financial institution is working hard to ensure that customers have access to their money and accurate account information;
- Remind depositors that the Year 2000 date change will not affect their \$100,000 federal deposit insurance coverage;
- Describe the institution's comprehensive plan to address the Year 2000 challenge, including remediation efforts and testing of internal and external systems; and
- Discuss contingency plans for resuming operations in the event of a Year 2000 disruption.

The Customer Communication Outline also suggests that banks may want to provide information that is tailored to the needs and concerns of different types of customers. For example, when communicating with retail customers, banks may focus more on addressing deposit insurance, access to funds, and other specific customer concerns.

Safety and Soundness Standards

In October 1998, the OCC, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of Thrift Supervision issued Year 2000 guidelines establishing minimum standards for safety and soundness under Section 39 of the Federal Deposit Insurance Act (12 U.S.C. § 1831p-1). The Year 2000 safety and soundness guidelines are based on FFIEC Year 2000 guidance on testing, contingency planning, customer risk, customer awareness, and the project management process. The guidelines distill certain essential requirements from these prior issuances and are fully consistent with those prior issuances. The guidelines were effective upon publication, but subject to a comment period which expired on December 14, 1998. The FFIEC agencies are in the process of reviewing public comments received as of the end of December 1998 and soon will decide on the issuance of final guidelines.

Under Section 39, standards adopted as guidelines vest the banking agency with discretion to take rapid and effective action with respect to banks that violate the guidelines. Specifically, the agency can require a violating bank to provide an acceptable plan for becoming compliant with the guidelines. If a bank either fails to provide an acceptable plan or fails to implement that plan, the agency may issue a Safety and Soundness Order, which is immediately enforceable to the

same extent as a Cease and Desist Order issued under 12 U.S.C. § 1818. The section 39 safety and soundness guidelines and remedies are appropriate to deal with the Year 2000 problem because Section 39 permits prompt and effective supervisory action. With the century date change rapidly approaching, the banking agencies may not have time to use conventional enforcement remedies under 12 U.S.C. § 1818.

The guidelines describe certain essential steps that each national bank must take to ensure its mission-critical systems are Year 2000 ready. Since the issuance of the guidelines, the OCC has used these guidelines and Section 39 remedies as the basis for our enforcement approach to national banks with Year 2000 issues.

OUTREACH EFFORTS

Through December 31, 1998, OCC representatives from the Washington headquarters office participated in 98 outreach meetings with various groups, including bankers, service providers, software vendors, and other representatives from the financial community. The OCC also has worked with other FFIEC agencies to train foreign bank supervisors. For example, the OCC trained regulators from 11 Latin American countries at a conference in Chile in early December. In conjunction with the other FFIEC agencies, we hold regular meetings to discuss Year 2000 issues with representatives from the Bank Administration Institute, American Bankers Association, Independent Bankers Association of America, and other financial institutions trade associations. The OCC, through its six district offices, has sponsored outreach programs with community, mid-sized, and credit card banks within each district. In addition, district office management and staff have participated in over 130 outreach meetings around the country sponsored by the FFIEC and state bankers associations. To date, over 12,000 bankers have participated in meetings held in 38 states.

In addition, we are hosting four roundtable sessions in Chicago, San Francisco, Charlotte and New York in February and March 1999. The meetings include Year 2000 Project Managers from the largest 32 national banks, their respective OCC examiners-in-charge and BIS examiners, and representatives from the other FFIEC regulatory agencies. These meetings are designed to promote open dialogue between the bankers and examiners about current key topics surrounding Year 2000.

MAJOR RISK FACTORS AND CONCERNS

The following is a brief overview of three of the most significant risk factors facing the banking industry -- public confidence, international, and infrastructure -- and the OCC's efforts to address them.

Public Confidence

As stated in previous reports, the OCC and the other federal financial regulators believe that

educating bank customers about the Year 2000 problem and the progress the industry is making to address the problem is critical to maintaining public confidence in the banking system.

To date, the OCC has observed that many bank customer awareness programs are focused primarily on answering customer questions, rather than proactively reaching out to customers with Year 2000 information. We encourage banks to consider additional efforts such as providing informational brochures or other written disclosures in monthly or quarterly statements, establishing toll-free hot lines for customer inquiries, holding educational seminars, and posting Year 2000 information on their Internet sites.

The more effective customer awareness programs we have seen include the following elements:

- Delivering a consistent message throughout the organization, with senior management commitment and involvement. This includes providing effective employee training to ensure that knowledgeable employees are available to answer customer questions.
- Working with other financial institutions and community and civic organizations to inform the general public. This has been done in a number of ways, including: meeting with community and civic groups, making information available through banker associations, working with the local media to ensure accurate reporting, and leveraging off educational efforts of state and national bank trade associations.

As Year 2000 press coverage intensifies, the OCC and other financial institution regulators strive to ensure that the facts reported by the press are correct. For example, concern for accurate reporting on the Year 2000 prompted the heads of the FFIEC agencies to write a letter to the editor of USA Today to correct misinformation about differences in Year 2000 preparedness among large and small banks (letter printed in 1/13/99 issue of USA Today).

The OCC taken a number of steps to assist national banks in communicating with their customers on the Year 2000. As discussed earlier, the OCC sent a CD-ROM to all national banks during the fourth quarter that provided an overview of Year 2000 issues, a review of agency Year 2000 supervisory guidance and a discussion of OCC Year 2000 examination procedures. The OCC also provided national banks with a list of frequently asked questions and answers on the Year 2000, which were based on questions received by the OCC from bank customers.

OCC officials continue to participate in industry conferences, OCC-sponsored outreach events, and to respond to inquiries from the industry and the media. The OCC stresses to banks that our public awareness efforts cannot be a substitute for their aggressive public outreach programs.

International

International Year 2000 Status Banking supervisors and financial institutions are focusing more attention on international Year 2000 risks, including the interdependencies and cross-border

linkages that exist in the global economy. Increased concern about the international Year 2000 situation has prompted an unprecedented level of cooperation within the financial industry on coordinated testing plans, information sharing and contingency planning. Key collaborative public and private sector groups, such as the U.S. President's Council on Year 2000, the Joint Year 2000 Council, the Basle Committee, and the Global 2000 Coordinating Group, continue to stress the need for active central government leadership to solve the Year 2000 problem.

Based on the OCC's examination activities and external coordination efforts with foreign bank regulators, the following is a summary of the status of international Year 2000 efforts and risks:

- Good progress is being made on Year 2000 preparations in a number of key industrialized countries. Countries which are meeting or exceeding international benchmarks for Year 2000 remediation and testing share several common characteristics: strong central government leadership, aggressive remediation and testing milestones, good information exchange, and an active regulatory environment. Countries which are falling behind international Year 2000 benchmarks generally lack one or more of these common characteristics. In most countries, the financial sector has taken the lead on national and international coordination. However, national infrastructure and key utilities in many countries have not made as much progress as the financial sector on Year 2000 preparations. A major factor behind this lagging progress is the absence of strong Year 2000 central government efforts in many countries.
- The international energy sector presents the most significant concerns. With few exceptions, little information is available on the readiness of energy generation distribution systems in most countries. In addition, while the international telecommunication sector has increased its coordination of cross-border testing and information sharing in the past several months, telecommunication network readiness remains an area of concern in key parts of Europe, Latin America, and Asia. Further, the international maritime transportation sector generally lacks any credible international organizations to coordinate Year 2000 readiness, and therefore, little is known about its level of Year 2000 preparedness.
- There is a growing concern about whether there are adequate plans and resources to handle the Year 2000 challenge in certain emerging economies of Latin America, Asia, and Eastern Europe. Better information-sharing on Year 2000 remediation and testing results in these regions can contribute significantly to improving confidence that these regions are effectively meeting their Year 2000 challenges. Conversely, a continued lack of adequate information disclosure may exacerbate negative perceptions in the marketplace about the ability of certain countries or markets to deal with the Year 2000 problem.
- The collective macro-economic risk potential of business failures due to Year 2000 disruptions in the small and medium sized enterprise (SME) sector is becoming an increased international concern. There is a need for governments to be more active in reaching out and educating the SME sector about the Year 2000 challenge.

OCC's International Year 2000 Activities The OCC continues to work actively with other bank supervisors through bilateral and multilateral discussions to develop Year 2000 supervisory guidance for international financial market supervisors. The OCC is an active contributor to the Basle Committee on Banking Supervision and the Joint Year 2000 Council.⁴ Through our participation in the Basle Committee's Year 2000 Task Force, the OCC has helped to focus international bank supervisors on the global significance of the Year 2000 issue. For example, the OCC has helped to develop cross-border Year 2000 coordination principles and examination procedures, guidance on Year 2000 contingency planning for international bank supervisors, and an international survey on the preparedness of the banking systems in individual countries. The OCC, in conjunction with other Task Force members, is assisting with regional bank supervisory workshops and round table meetings that focus on sharing supervisory best practices for dealing with the Year 2000 problem.

As part of the OCC's ongoing efforts to assess international Year 2000 risks to the national banking system, our Global Banking Division is collecting international Year 2000 readiness information through outreach activities with foreign financial industry supervisors, and our examinations of internationally active national banks and federally licensed branches and agencies of foreign banks. In addition, several senior OCC examiners have visited foreign countries to assess the readiness of the overseas branches of our national banks and of major foreign banks and efforts being made by foreign bank supervisors. The information we are collecting aids the OCC's assessment of the Year 2000 readiness of international financial systems, clearing and settlement systems, and infrastructure providers that could have an impact on the operations of U.S. banks, as well as the development of appropriate supervisory responses.

Infrastructure (Telecommunications/Power)

Over the past quarter, national banks and Federal branches and agencies have continued to receive additional information on the Year 2000 readiness efforts of telecommunications providers and power companies. Many institutions report that their telecommunications providers have advised them that they are making adequate progress toward remediating and testing their telecommunications networks. Power companies are starting to make more information available than they have provided in the past.

The OCC continues to remind financial institutions to gather information from, and assess Year 2000 readiness efforts of, all mission-critical service providers, including telecommunications providers and power companies. As part of the Phase II Workprogram, OCC examiners will review progress of national banks' efforts to assess Year 2000 readiness of infrastructure

⁴ The Basle Committee formed the Year 2000 Task Force to facilitate information-sharing and Year 2000 supervision policy coordination among bank supervisors. The Joint Year 2000 Council is a multilateral group of international financial market regulatory authorities that facilitates information sharing on regulatory and supervisory Year 2000 strategies, develops contingency planning measures, and establishes links with national and international private sector organizations.

providers.

The OCC continues to be an active participant in the Financial Sector Group of the President's Council on Year 2000 Conversion. On behalf of the Council, the regulators are sponsoring a series of one day summit meetings on the Year 2000 with representatives of financial sector trade groups. On December 3, 1998, the FDIC and Federal Reserve sponsored a conference to address infrastructure issues, particularly those related to telecommunications and power companies. The speakers included John Koskinen, Chairman of the President's Council; Michael Powell, FCC Commissioner; Senator Robert Bennett, Chairman of the Senate Committee on Year 2000; and a representative of North American Electric Reliability Council (NERC). In addition, the summit featured panel discussions on power and telecommunications. On April 15, 1999, the OCC will co-sponsor with the OTS a one day Year 2000 summit to address contingency planning and customer awareness. House Banking Committee Chairman James Leach is scheduled to be the keynote speaker.

In addition, the OCC participates in the monthly meetings of the Securities Industry Association Facilities Subgroup and disseminates information from these meetings to its examiners and to the other FFIEC agencies. The OCC also participates in the bi-weekly conference calls of the Bank Administration Institute's Facilities Subgroup to discuss infrastructure issues with participating bankers. Some of the issues discussed recently have included testing security systems, event/command center planning, disclosure legislation (along with the BAI Legal Subgroup), landlord/tenant issues, and testing with utilities.

FFIEC CONTINGENCY PLANNING

The OCC chairs the FFIEC Contingency Planning Working Group, which was formed to address Year 2000 systemic risk concerns. Nine subgroups began meeting in early October to prepare recommendations for possible interagency action to better manage and mitigate potential Year 2000 risks. The following is a brief description of the nine subgroups to address liquidity, communications, infrastructure, key players, international payment systems, fraud, nonviable institutions, service providers and software vendors, and sharing resources:

- The liquidity subgroup is identifying potential systemic Year 2000 liquidity issues and will be monitoring Year 2000 risk that may be experienced in both the wholesale and retail markets.
- The communications subgroup is evaluating the agencies' communications strategies and plans relating to the Year 2000 to determine where overlap exists and what efforts might be undertaken jointly. The group also has begun conducting market research to assess customer awareness of the Year 2000 problem and to test reaction to potential regulatory public affairs messages.
- The infrastructure subgroup is working with other governmental agencies (e.g. the President's Council) and trade associations (e.g. Securities Industry Association) to influence the activities

of the infrastructure providers through interaction with infrastructure provider regulators, trade groups, and the providers themselves.

- The subgroup responsible for the evaluation of key players is finalizing an interagency framework for the evaluation of those financial services firms that participate most significantly in "strategic markets," that is, those markets in which even a temporary disruption could have significant implications to the broader capital markets. The OCC is conducting examinations of some of these institutions and sharing the information among the other FFIEC agencies. The objective of these evaluations is to provide timely assessments of national key players' preparedness within strategic markets so that the bank regulatory agencies may plan and prepare responses for potentially vulnerable areas.
- The international payment systems subgroup is developing strategies to facilitate information sharing regarding Year 2000 preparedness in foreign countries among banking agencies, public and private sector groups, and market participants. The subgroup has developed an international Year 2000 database that will help to identify potentially vulnerable areas that could impact the U.S. banking system. The subgroup will develop supervisory recommendations on how to respond to expected and unexpected contingencies with a focus on communication and coordination with domestic and international regulators, and private sector participants. The group is relying on the OCC's international database for international Year 2000 readiness information. Information gathered through outreach activities with foreign financial industry supervisors and examinations of internationally active institutions will be used to monitor international payment system risk concerns.
- The fraud subgroup is discussing ways the Year 2000 issue may expose financial institutions and their customers to fraud and is coordinating its activities with other government agencies, primarily federal law enforcement agencies. The fraud subgroup is considering whether to develop guidance on how to deal with potential fraud problems.
- The non-viable institutions subgroup is working to develop the legal basis to address or resolve non-viable institutions due to Year 2000 risks. The subgroup is studying the feasibility of adopting a standard set of data that each institution or specific problem institutions would be required to maintain on back-up tapes. The subgroup is setting up procedures for interagency cooperation on clearing bidders to participate in the Year 2000 resolution process and deciding how to select a winning bid. The agencies also have formed a subgroup to share and coordinate ideas regarding support for viable institutions with Year 2000 problems.
- The service providers and software vendors subgroup is addressing issues concerning the critical role of potential Year 2000-related disruptions at significant service providers and software vendors that service multiple financial institutions. The group is monitoring the status of key service providers and software vendors; researching the conversion capacity of key service providers and software vendors; establishing a forum for discussing significant supervisory issues and concerns; and establishing guidelines for assessing Year 2000 conversion

risk.

- The resource sharing subgroup is working to identify agency resources and staff with the range of critical skills necessary to address potential problems and operational/funding issues arising from the Year 2000-century date change. The subgroup also is developing the information, processes, and procedures necessary to allow each of the agencies to appropriately share resources in the context of Year 2000 initiatives and/or problems.

OCC INTERNAL REMEDIATION EFFORTS

Overview of OCC's internal Year 2000 remediation efforts

The OCC completed Year 2000 renovation and validation of all mission-critical systems on November 30, 1998, well in advance of Treasury Department deadlines.

Mission-Critical IT Systems The OCC identified 13 mission-critical information technology (IT) systems that support the key business functions of the agency.⁵ See Table 3. One of the 13 is now retired (Trust Billing); the remaining 12 mission-critical IT systems have been renovated and validated as Year 2000 compliant.

⁵ The mission-critical systems are Consolidated Application System, Time and Travel Reporting System, Time Entry, General Financial System, Salary Allocation, Bank Assessment, Lockbox, Security Authorization, Budget Code Restructure, Corporate Activities Information System, Supervisory Monitoring System, National Bank Surveillance Video Display System, and Trust Billing.

Table 3
OCC Year 2000 Remediation Schedule for Mission-Critical Systems

System	Renovation	Validation	Implementation	IV&V	Certification	Contingency Plan	Trigger Date
CAS	✓	✓	✓ (04/25/98)	✓	✓ (11/12/98)	✓	1/3/2000
TTRS	✓	✓	✓ (07/28/98)	✓	✓ (11/09/98)	✓	1/3/2000
TE	✓	✓	✓ (03/20/98)	✓	✓ (11/20/98)	✓	1/3/2000
SA	✓	✓	✓ (02/28/98)	✓	✓ (10/22/98)	✓	1/5/2000
GFS	✓	✓	✓ (11/30/96)	✓	✓ (10/09/98)	✓	1/3/2000
BA	✓	✓	✓ (02/14/98)	✓	✓ (11/30/98)	✓	1/31/2000
LOCKBOX	✓	✓	✓ (02/19/98)	✓	✓ (10/09/98)	✓	1/3/2000
AZ	✓	✓	✓ (02/14/98)	✓	✓ (11/30/98)	✓	6/1/1999
BCR	✓	✓	✓ (07/24/98)	✓	✓ (11/30/98)	✓	1/3/2000
CAIS	✓	✓	✓ (11/22/98)	✓	✓ (11/30/98)	✓	1/1/2000
SMS	✓	✓	✓ (11/01/98)	✓	✓ (11/20/98)	✓	1/1/2000
NBSVDS	✓	✓	✓ (11/01/98)	✓	✓ (11/20/98)	✓	1/1/2000
Trust Billing	*	*	*	N/A	N/A	N/A	NA

* Trust Billing was retired as of 10/31/98. Not necessary to make Year 2000 compliant.

✓ Completed, date in parentheses is actual completion date

The OCC's mission-critical IT systems exchange data with five external parties: the Federal Reserve, the Federal Deposit Insurance Corporation, the National Finance Center, Treasury, and the First National Bank of Chicago. All outgoing data exchanges were compliant by November 30, 1998 and have been tested by the OCC's exchange partners. All incoming data exchanges that were noncompliant were bridged and tested by the OCC by November 30, 1998. The OCC continues to work with its data exchange partners to ensure the compliance of critical external data exchanges.

Non-Mission-Critical IT Systems As of December 31, 1998, the OCC has 264 non-mission-critical IT systems, of which 19 required renovation. Of these 19 systems, 18 have been renovated, validated, and implemented as Year 2000 compliant as of December 31, 1998. The remaining system is expected to be compliant by March 31, 1999.

Non-IT Mission-Critical Systems The OCC's Non-IT Year 2000 Program includes mission critical real property at primary sites (i.e., headquarters, data center, Ombudsman's office, district offices) and non-mission-critical real property at secondary sites (i.e., field offices). The program

also includes non-mission critical equipment at primary and secondary sites.

The OCC continues to track the progress of all program management phases and is working toward certification at each primary site. Currently, the OCC is tracking the progress of 22 mission critical systems.⁶ Of the mission critical systems identified, 15 systems are already compliant and seven systems remain non-compliant. Five of the non-compliant systems are scheduled for replacement while two are scheduled for repair. Based on the milestones established for renovation and validation phases, six sites, including OCC headquarters and data center, plan to complete all program management phases by the March 31, 1999 milestone. The remaining three primary sites, all of which contain leased systems, will not complete all program phases until the second or third quarter of 1999. The OCC will continue to work closely with those sites to ensure completion of all phases.

The OCC also tracks non-mission critical real property at all secondary sites. Follow-up at secondary sites is based on the current status and criticality of the site to the OCC. Additionally, the assessment of all non-mission critical personal property is underway. The assessment of personal property is scheduled for completion by March 31, 1999. At that time appropriate renovation and testing strategies will be defined.

OCC Business Continuity Plan

The OCC contracted with KPMG to assist in the development of a revised Business Continuity Plan for the OCC's internal systems. Business Continuity Planning at the OCC focuses on five core business processes and consists of a Business Impact Analysis (BIA) and a Business Continuity Plan (BCP). The core processes include: Bank Supervision Policies and Procedures, Strategic Planning and Systemic Risk Management, Individual Bank Supervision, Enforcement, and Corporate Activities. The scope of the BIA and BCP include and extend beyond Year 2000 disruption scenarios. Specific efforts to develop and test contingency plans for Year 2000 disruption scenarios have been completed in a parallel effort with the BCP. The OCC completed the BIA and a final draft of the BCP in December 1998. Implementation and testing of the BCP is ongoing and scheduled for completion by March 31, 1999.

BCP testing will include both desktop and controlled, real world simulations. Desktop testing will identify specific triggers, validate and clarify procedures, finalize a key recovery document inventory, finalize personnel contact information, and familiarize core process teams with their responsibilities regarding BCP. The controlled, real-world simulation will test the effectiveness of communications procedures and the core process team's ability to identify and prioritize work flow during a disruption.

OCC Contingency Planning and Testing

⁶ The OCC reduced the originally reported number of Non-IT mission-critical systems after more detailed analysis and testing of these systems determined they did not contain date dependent functions.

OCC business unit representatives reviewed and updated system contingency plans in December 1998. All systems contingency plans will be reviewed again in June and November 1999 to determine if they are still operative and will sufficiently replace the automated system functions for a reasonable period. Business unit representatives, in collaboration with ITS staff, developed testing strategies and plans for each mission-critical system. Non-mission-critical systems with complex contingency plans and those with sufficient importance or size also have a testing strategy and plan. The contingency plan tests will be performed during January, July, and December 1999.

As an additional level of safety and to ensure that connected systems function properly, the OCC plans to complete simultaneous agency-wide tests. During March 1999, the OCC will conduct tests among multiple internal mission-critical systems, external parties, and infrastructure providers. We expect these tests, in addition to the tests we have done on individual or closely clustered systems, will ensure that the OCC's entire computing environment can operate properly in the next century.